Arctic National Wildlife Refuge: A Crown Jewel in Jeopardy

Lisa J. Booth

Follow this and additional works at: https://scholarship.law.umt.edu/plrlr

Recommended Citation

This Comment is brought to you for free and open access by The Scholarly Forum @ Montana Law. It has been accepted for inclusion in Public Land and Resources Law Review by an authorized editor of The Scholarly Forum @ Montana Law.
COMMENTS

ARCTIC NATIONAL WILDLIFE REFUGE: A CROWN JEWEL IN JEOPARDY

Lisa J. Booth

Alaska has been called a nursery to the world, providing nesting and feeding areas for some 400 million migratory birds which disperse each Fall to at least six continents; calving and denning sites for international populations of caribou and polar bear; and the spawning grounds for salmon, other fish and shellfish populations which feed the world.¹

I. INTRODUCTION

The question of whether or not to open the “Crown Jewel”² of wildlife refuges, the Arctic National Wildlife Refuge, to oil and gas development spurs much debate among conservationists, oil and gas companies, Alaskans, Canadians, and other private and public interest groups. Section 1003 of the Alaska National Interest Lands Conservation Act (ANILCA)³ prohibits oil and gas development unless authorized by an act of Congress. Ultimately, Congress will make this decision based on the Secretary of the Department of the Interior’s recommendation, and the thorough investigative report and final legislative environmental impact statement completed by the United States Fish and Wildlife Service in cooperation with the United States Geological Survey and the Bureau of Land Management.

This comment sets out the processes, parties, and conflicts involved in making this decision. It begins with a brief description of the significant Congressional acts passed in reference to Alaska and the Arctic National Wildlife Refuge (ANWR). Then a detailed outline of the Secretary of Interior’s duties under the Alaska National Interest Lands Conservation Act of 1980 (ANILCA) is provided. This is followed by a summary of the

2. Id. at 179, reprinted in 1980 U.S. CODE CONG. & ADMIN. NEWS at 5123.
required investigative report\textsuperscript{4} which was submitted to the Congress of the United States in one document with the Final Legislative Environmental Impact Statement\textsuperscript{5} and Secretary Hodel's recommendation. The summary includes discussion of the following: the targeted area itself, the fish and wildlife resources, the human environment, an assessment of oil and gas potential, and the National need for domestic sources of oil and gas. The comment ends with an analysis of Secretary Hodel's recommendation for full leasing, allegedly based on the investigative report submitted to Congress, public comment, the Nation's need for energy, and the Nation's ability to develop oil and gas in Alaska in an environmentally sound manner. The analysis concludes that Secretary Hodel's recommendation is inconsistent and flawed.

II. History

The United States purchased Alaska from Russia in 1867 for $7.2 million dollars.\textsuperscript{6} In 1958 Alaska became a member of the Union\textsuperscript{7}, and received the right to 90% of all bonuses, royalties and rentals from oil and gas leasing of any federal public lands under the Mineral Leasing Act of 1920.\textsuperscript{8}

Just two years later, at the request of Interior Secretary Seaton, President Eisenhower created the Arctic National Wildlife Refuge to preserve the unique wildlife, wilderness, and recreational values of the area.\textsuperscript{9} In original form the Refuge contained 8.9 million acres.\textsuperscript{10} With the exception of mineral leasing laws, the Land Order creating the Refuge specifically withdrew the area from all forms of appropriation under the public land laws.\textsuperscript{11}

Shortly thereafter, the National Wildlife Refuge System Administra-
tion Act of 1966\textsuperscript{12} consolidated all national refuge units under one system.\textsuperscript{18} Other than consolidation, the Act did little to spell out standards to guide the administration of the System.\textsuperscript{14} However, the Act did authorize the Secretary to "permit the use of any area within the System for any purpose, including but not limited to hunting, fishing, public recreation and accommodations, and access whenever he determines that such uses are compatible with the major purposes for which such areas were established."\textsuperscript{16}

Hence, the Act codified the illusive and quite flexible "compatible use" test. The National Wildlife Refuge System Administration Act fails to offer a definition of compatible use, as does ANILCA.\textsuperscript{16} However, the implementing regulations for conveyances of national wildlife refuge lands under the Alaska Native Claims Settlement Act of 1971\textsuperscript{17} expressly provide that compatibility means the proposed uses must not "materially impair the values for which the refuge was established."\textsuperscript{18} Consequently, each "use" must be compatible with all others. More specifically, oil and gas development must not materially impair the fish, wildlife, water resources, vegetation, subsistence, and other various uses presently existing within the particular wildlife refuge.

The most significant Act in Alaska's short history, passed during the Carter administration, is the Alaska National Interest Lands Conservation Act of 1980 (ANILCA).\textsuperscript{19} ANILCA added approximately 103 million acres to the federal conservation systems to protect the lands' resource values through permanent federal ownership and management.\textsuperscript{20}

\begin{itemize}
\item \textsuperscript{12} 16 U.S.C. §§ 668dd and 668ee (1982).
\item \textsuperscript{13}  Id. § 668dd(a)(1).
\item \textsuperscript{14} M. Bean, The Evolution of National Wildlife Law 133 (1977).
\item \textsuperscript{15} 16 U.S.C. § 668dd(d)(1)(A) (1982). See also Bean, supra note 14, at 133-134. The Act also placed restrictions on the transfer disposal of lands within the system and clarified the Secretary's authority to accept donation of money to be used for land acquisition. 16 U.S.C. §§ 668dd(a)(2) and 668dd(b)(2).
\item \textsuperscript{16} See infra text accompanying notes 19-27.
\item \textsuperscript{17} 43 U.S.C. §§ 1601-1628 (1982); See infra text accompanying notes 138-146.
\item \textsuperscript{18} 43 CFR 2650.4-6(b); See also National Audubon Society v. Hodel, 606 F.Supp. 825 (D.Alaska 1984); Schwenke v. Secretary of the Interior, 720 F.2d 571 (9th Cir. 1983). In Schwenke the court held that grazing of livestock is compatible with wildlife use, yet it also found that wildlife have a limited priority in access to forage resources reasonably necessary to maintain a balanced wildlife population. Webster's New Collegiate Dictionary 277 (1979 ed.) defines "compatible" as "capable of existing together in harmony."
\item \textsuperscript{20} G. Coggins and C. Wilkinson, Federal Public Land and Resources Law 167 (2nd ed. 1986). ANILCA added 53.7 million acres to the National Wildlife Refuge System, 43.5 million acres to the National Park System, and 56.4 million acres to the National Wilderness Preservation System. Additionally, thirteen rivers were added to the National Wild and Scenic Rivers System, and two special BLM land designations were created, the 1.2 million acres Steese Conservation Area, and
\end{itemize}
The Act either established, or added to, 16 national wildlife refuges in Alaska. More specifically, ANILCA added approximately 10 million acres to the Arctic National Wildlife Refuge (ANWR), making it 18 million acres, the largest arctic wilderness sanctuary of the world. ANILCA then declared 8 million acres of ANWR, consisting primarily of the original Refuge created in 1960, wilderness.

ANILCA also redefined ANWR's purpose:
(i) To conserve populations and habitats in their natural diversity including, but not limited to, the Porcupine caribou herd (including participation in coordinated ecological studies and management of this herd and the Western Arctic caribou herd), polar bears, grizzly bears, muskoxen, Dall sheep, wolves, wolverines, snow geese, peregrine falcons and other migratory birds, and Arctic char and grayling; (ii) To fulfill the international treaty obligations of the United States with respect to fish and wildlife and their habitats; (iii) To provide, in a manner consistent with the purposes set forth in subparagraphs (i) and (ii), the opportunity for continued subsistence uses by local residents; and (iv) To ensure, to the maximum extent practicable and in a manner consistent with the purposes set forth in paragraph (i), water quality and necessary water quantity within the refuge.

Further, ANILCA reiterated the National Wildlife Refuge System Administration Act's test concerning ANWR stating, "the Secretary may not permit any use, or grant easements for any purpose. . .unless such use or purpose is compatible with the purposes of the refuge." 

III. Title X - Federal North Slope Lands Studies, Oil and Gas Leasing Program and Mineral Assessments

ANILCA put management of important oil and gas resources in federal hands. Title X of ANILCA instructs the Secretary of the Interior
to conduct an overall study program of the federal north slope lands. The study must include a synopsis of the following: potential oil and gas resources, impacts of development on the wildlife resources, particularly on the Arctic and Porcupine caribou herds and polar bear, and the national need for oil and gas in comparison to the national interest in preservation and protection of the wilderness and wildlife. As mentioned, Section 1003 of ANILCA specifically prohibits all oil and gas leasing, development, or production in ANWR without Congressional authorization.

Section 1002 of ANILCA calls for a comprehensive and continuing inventory and assessment of the fish and wildlife resources on the coastal plain in ANWR, commonly referred to as the 1002 area, along with an analysis of the impact upon these resources if oil and gas exploration, development, and production proceeds. The Secretary is responsible for conducting this continuing study, which includes assessing the size, range, habitats, carrying capacities, distribution, impacts of human activities, and potential impacts of oil and gas exploration, development and production on the populations of the fish and wildlife. Further, the Secretary must analyze the potential effects of such activities on the culture and lifestyle of affected Native and other people. Section 1002 allows the Secretary to authorize exploratory activity within ANWR in a manner that avoids significant adverse effects on the fish and wildlife and other resources.

IV. THE 1002 REPORT

Based on the above studies, the Secretary then must prepare and submit to Congress a report, commonly referred to as the 1002 Report, composed of information on the areas containing oil and gas production potential, including an estimate of the volume of oil and gas involved, how it can be transported, and how it relates to our national need. Additionally, the report must contain information on the fish and wildlife concerned and any adverse effects exploration, development and production may have on them. The Secretary then must recommend to Congress whether or not ANWR should be open for oil and gas development. Included in this

28. Id. at § 3141(c).
29. Id. at § 3143.
30. Id. at § 3142(a).
31. Id. at § 3142(c).
32. Id.
33. Id. at § 3142(a).
34. Id. at § 3142(a).
35. Id.
36. Id.
recommendation must be all other legal steps he deems necessary to preserve the other resources within the refuge.\textsuperscript{37}

The United States Fish and Wildlife Service (USFWS), the managing agency of national wildlife refuges,\textsuperscript{38} conducted studies and compiled the relevant data for the Secretary.\textsuperscript{39} Under a memorandum of understanding the Bureau of Land Management and the U.S. Geological Survey assisted the USFWS in this task.\textsuperscript{40} Fifteen companies were also allowed to explore the area in the years 1983 through 1985 to assist in the assessment of oil and gas potential.\textsuperscript{41} During the winters of these years, when adverse effects on wildlife are the least, the companies conducted seismic tests.\textsuperscript{42} The USFWS allowed helicopter travel only, and all the companies activities were monitored closely.\textsuperscript{43} Upon completion of their studies, the USFWS compiled, and made available for comment, a draft 1002 Report and environmental impact statement.\textsuperscript{44}

Included in the final 1002 Report is an analysis of alternative courses of action and their environmental consequences.\textsuperscript{45} The National Environmental Policy Act (NEPA) requires an analysis of alternative courses of action before deciding on whether to allow certain developments, constituting major federal actions, on public lands.\textsuperscript{46} The report discusses the

\begin{flushleft}
\textsuperscript{37} Id.
\textsuperscript{38} The 1976 amendment to the National Wildlife Refuge System Administration Act at Pub. L. 94-223, 90 Stat. 199 (1976), specifically gives the USFWS the administrative powers over refuge lands. See also Trustees for Alaska v. Watt, 524 F.Supp. 1303 (D.Alaska 1981), aff'd, 690 F.2d 1279 (9th Cir. 1982). In Trustees for Alaska, the court held that the Secretary of the Interior's attempts to transfer the management of the guidelines of the 1002 study (16 U.S.C. § 3142(d)), the writing of the 1002 Report itself (16 U.S.C. § 3142(h)), and the responsibility of approving exploration plans (16 U.S.C. § 3142(e)), from the USFWS to the United States Geological Service were beyond his statutory authority.

\textsuperscript{39} 1002 REPORT, supra note 23, at 3.
\textsuperscript{40} Id. The interagency memorandum of understanding was dated June 1983.
\textsuperscript{41} Id.
\textsuperscript{42} Id.
\textsuperscript{43} Id.
\textsuperscript{44} Id. at 5. See infra text accompanying notes 127-131.
\textsuperscript{45} Id. at 97-176.
\textsuperscript{46} 42 U.S.C. § 4332(2)(c)(iii) (1982). Specifically § 4332(c) of NEPA states:

[I]n every recommendation or report on proposals for legislation and other major federal actions significantly affecting the quality of the human environment, a detailed statement [is required to be made] by the responsible official on — (i) the environmental impact of the proposed action,
(ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
(iii) alternatives to the proposed action,
(iv) the relationship between local short-term use of man's environment and the maintenance and enhancement of long-term productivity, and
(v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

A major federal action defined in Chelsea Neighborhood Assn. v. United States Postal Service, 516
following five alternatives:

(A) authorize full leasing of entire 1002 area;
(B) authorize leasing limited to a part of the 1002 area;
(C) authorize further exploration, including exploratory drilling;
(D) continue current refuge status with no further oil and gas activity allowed; or
(E) designate the entire area as wilderness.\(^{47}\)

Secretary Hodel recommends full leasing, alternative A, calling it the “preferred alternative”.\(^{48}\) “The State of Alaska recommends alternative B, asking Congress to immediately open the 1002 area to oil and gas leasing, with the exception of the area described by the U.S. Fish and Wildlife Service as the “core” caribou calving area.”\(^{49}\) Canada\(^{50}\), many environmental groups\(^{51}\), Delaware’s Republican Senator Bill Roth, and House Interior Committee Chairman Morris Udall, favor the implementation of alternative E, wilderness designation.

Senator Roth, the chief Republican sponsor of ANILCA, which left ANWR’s fate open, has submitted S. 1804 to the Senate which declares the entire refuge wilderness.\(^{52}\) Roth’s bill faces the strong opposition of Alaska’s Republican Senators Frank Murkowski and Pat Stevens, who have introduced a pro-development bill, S.1217.\(^{53}\) In the House, Interior Committee Chairman Morris K. Udall D-AZ introduced H.R. 39 to designate the entire Refuge a wilderness area, while Representative Don Young R-AK introduced H.R. 1082 to open the coastal plain to oil and gas

\(^{47}\) 1002 REPORT, supra note 23, at 4, 97-104.
\(^{48}\) Id. at 189.
\(^{49}\) Id. at Appendix — Public Comments and Responses at S-1.
\(^{50}\) Id. at Appendix — Comments and Responses at F-1 through F-5.
\(^{52}\) Measure would bar ANWR development, Anchorage Daily News, October 22, 1987. Notably, the original draft of ANILCA did designate the entire refuge wilderness. The House favored the original draft, while a majority of the Senate opposed it; hence the middle ground; only a third of the Refuge is designated wilderness. S. Rep. No. 413, supra note 1, 1980 U.S. CONG. & ADMIN. NEWS at 5074. See also Sagalkin and Panitch, supra note 26, at 117 n. 10, 129 ns. 52-55.
Thus, Congress is currently faced with opposing bills in both the House and the Senate. On February 25, 1988, the Senate Energy and Natural Resources Committee recommended passage of S. 2214 by a slim 11 to 8 vote. This bill allows for limited leasing using a phase in plan of leasing 300,000 acres within 18 months after the final regulations are submitted by the Secretary. The second lease sale must be at least 3 years later, and sales may be conducted every other year thereafter. Additionally, S. 2214 requires the Secretary of Energy to complete a comprehensive national energy plan, not later than fifteen months after the date of bill's enactment. Indeed, although the Senate Energy and Natural Resources Committee has finally passed a bill, the congressional act needed to open ANWR to oil and gas development will not be passed quickly. Strong conflicting views ensure heavy fighting from all sides.

V. THE 1002 AREA

The 1002 area contains 1.55 million acres of coastal plain consisting largely of pristine, extremely fragile tundra and wetlands. It is located in the northernmost part of the Arctic Refuge between the Brooks Range and the Beaufort Sea, more than 250 miles above the Arctic Circle. The climate is arctic marine, extremely cold in the winters, and cool in the short summers, with persistent winds throughout the year. Ten percent of the area is glaciated, and all but a small area is believed to be underlain

55. To complicate matters further, currently more than 36 Federal and 5 Alaska State laws, and 111 separate regulations found in six separate titles of the Code of Federal Regulations apply to oil and gas activities in Alaska. 1002 REPORT, supra note 23, at 4.
57. S. 2214, 100th Cong., 2d Sess. § 304(c) (1988).
58. Id. at § 901. At the time of publication a new Jones bill to replace the original H.R. 3601 was in the making. H.R. 3601 called for an exploratory drilling phase followed by development. H.R. 4343 introduced March 31 by Representative Mike Lowry (D-Wash) would required the preparation of a national energy policy before Congress acted on leasing. Public Land Law News, April 14, 1988, at 2.
59. “The Department of the Interior's recommendation to allow oil and gas development in the refuge on Alaska’s North Slope has become the most contentious environmental issue of the 100th Congress, which must decide the refuge's fate.” EPA Staffers Cry Foul on Arctic Wildlife Refuge Report, Great Falls Tribune, December 15, 1987, at 9A. In this article it was uncovered by EPA staff members that proper procedure was not followed in that the EPA's recommendation was drafted largely by members in the Alaska office. As a result, three EPA regional employees, two in the Seattle office, and one in Anchorage, who objected to the way the recommendation came together, either left the agency later or were transferred to other jobs.
60. 1002 REPORT, supra note 23, at 7-8.
61. Id.
62. Id. at 9.
ARCTIC NATIONAL WILDLIFE REFUGE

completely by permafrost. 63

The 1002 area is the most biologically productive part of the
Arctic Refuge for wildlife and is the center of wildlife activity on
the refuge. Caribou migrating to and from the 1002 area and the
post-calving caribou aggregation offer an unparalleled
spectacle. 64

Unfortunately, of the 1002 area’s fish and wildlife resources, the
animal which faces the greatest danger if development proceeds, is the
Porcupine caribou. Section 306(a) of ANILCA states, “Congress finds
that the barren-ground caribou are a migratory species deserving study
and special protection, and that the Western Arctic and the Porcupine
herds of such caribou are of national and international significance.” 65
The Porcupine caribou herd, an international resource, was estimated in 1986
by the Alaska Department of Fish and Game to include 180,000 animals. 66
Despite Alaska’s total caribou population drop from 600,000 in 1971 to
only 216,000 in 1977 67, the Porcupine herd is now increasing, and is
currently the sixth largest caribou herd in North America. 68 The Porcu-
pine caribou herd ranges over 96,100 square miles of northeast Alaska and
northwest Canada and constitutes the largest population of large mam-
als shared by two nations. 69

Because the 1002 area is an important calving ground, the herd will
face great danger if development proceeds. Studies undeniably show
substantial portions of the herd consistently calve in the 1002 area every
year. 70 “Two years ago, 80% of the caribou herd calved in the 1002
area.” 71 A U.S. Fish and Wildlife biologist at ANWR stated, “[t]here is no
question in my mind that development would destroy their calving area.” 72

The report does indicate that the herd will likely experience “major”

63. Ferrians, Kachadoorian, and Greene, Permafrost and related engineering problems in
64. Draft Environmental Assessment Report, at 46. The 1002 draft report was submitted
to the public for comment. Then the 1002 final report was prepared. The final report is that which is
frequently cited in this comment.
News 5070, 5127.
68. Whitten, Population status and trend of the Porcupine caribou herd, 1982-1985 update
70. Id. at 22-23. Slight deviations in calving concentration in the area have occurred. These
slight deviations may be due to advanced emergence of new vegetation, scarcity of predators, early
snowmelt, topography, and/or proximity to insect relief habitat. Cameron, Issue—Caribou and
petroleum development in Arctic Alaska, 36 Arctic 227-231 (1983).
71. Waterman, Give us Jobs / Leave us Alone !, BACKPACKER 49 (March 1988).
72. Id.
effects if development proceeds.°8 Major effects in the biological environment are defined as "widespread, long-term change in habitat availability or quality which would likely modify natural abundance or distribution of species."74 The 1002 Report states that a change in distribution of the Porcupine herd could reasonably be expected. However, admitting the population decline cannot be predicted, the report claims an appreciable population decline is not expected.75 An obvious difficulty surfaces in reconciling no appreciable decline expectations with a finding of "major" effects.

Both Alaskans and Canadians rely on the Porcupine caribou herd for subsistence. Studies conclude that 3,000 to 5,000 animals are killed each year as a subsistence food source for various villages in and around the herd's migration area.76 Recent annual harvests of the caribou by Kaktovik, the village adjacent to the 1002 area, have ranged from 25 to 75 animals.77 Approximately 68% of Kaktovik's present subsistence use area is within the Arctic Refuge and 95% of the Village's households depend on the herd for their main source of meat.78 Thus, any change in the migration pattern, or decrease in the numbers of the herd could spell disaster for Kaktovik.

The 1002 Report clearly states that an unavoidable impact includes the "loss of subsistence hunting opportunities throughout approximately one-half the 1002 area and possible reduction in subsistence opportunities to communities outside the 1002 area that are dependent on harvest of migratory fish and wildlife populations that spend part of their time on the 1002 area."79 Thus, the village of Kaktovik, along with surrounding villages80, will likely experience "major" effects in their subsistence and

73. 1002 REPORT, supra note 23, at 166.
74. Id. at 107.
75. Id. at 124.
79. 1002 REPORT, supra note 23, at 145.
80. The 1002 Report does not specifically address the effects development will have on the surrounding villages presumably because they are not located within, or adjacent to, the 1002 area. Effected villages may include the following: Arctic Village and Chalkyitsik, Alaska, Old Crow and Venetie, Yukon Territory, and Arctic Red River and Tuktoyaktuk, Northwest Territories. 1002 REPORT, supra note 23, at 40. See also Id. at Appendix — Public Comments and Responses at F-21. In their letter to the Secretary, the Government of Yukon states, "fully four-fifths of the subsistence use of the herd is estimated to occur in Canada and there is no treatment of the consequence of a major decline in herd size of such use."
sociocultural way of life. Major effects in the human environment “require substantial changes in governmental policies, planning, or budgeting, or [are] likely to affect the economic or social well-being of residents.”

Nevertheless, Mayor Loren Ahlers, speaking for the people of Kaktovik, recommended limited leasing. However, when deciding which areas should not be leased, he wants the Secretary, at a minimum, to encourage public comment and involvement of all subsistence users of the Porcupine herd.

On the other hand, the Government of Canada, concluding that the risk of oil and gas development far outweighs the benefits, “firmly believes and urges that the 1002 lands should be given wilderness designation.” Also urged is an agreement between the U.S. and Canada to mark the regional importance of the area by considering a twinning of protected areas on both sides of the border.

As stated, the Fish and Wildlife Service estimates that if alternative A, full leasing occurs, major effects on the Porcupine caribou herd would probably result. In turn, major effects will occur in the village of Kaktovik. Surely, these major effects point to the conclusion that oil and gas development is not compatible with at least two of the most significant resources in the refuge; the people, and the Porcupine caribou, an internationally prized species of wildlife.

Furthermore, three of the area’s species are on the threatened and endangered list; the bowhead and gray whales are listed as endangered, and the arctic peregrine falcon is listed as threatened. In *TVA v. Hill*, the United States Supreme Court ruled that an absolute duty exists under the Endangered Species Act “to ensure that actions authorized, funded or carried out by [federal agencies] do not jeopardize the continued existence
of an endangered species, or result in the destruction or modification of habitat of such species. Additionally, there is an affirmative duty on federal agencies to take all steps necessary to recover threatened and endangered wildlife population to the point where they no longer need the Act. If the 1002 area is fully leased, the 1002 Report states that whales will experience a minor effect, defined as “short-term local change of species abundance, distribution, habitat availability, or habitat quality.” Certainly, even if only minor effects occur, the result is a violation of the Endangered Species Act. Full leasing violates the USFWS' duty to take all steps necessary to recover the whale. Moreover, reduction of availability, quality, or modification of habitat, will likely jeopardize the whale's existence.

VI. Oil and Gas Potential

The 1002 Report reveals there is a 19% chance that there is economically recoverable oil in ANWR. The 1002 Report concludes that a 19% chance for discovery of an economically feasible oil field is very high when taking into account the small size of the exploration area, 1.55 million acres, and the high cost of operations in the Arctic. For example, there is a 27% chance for discovery of an economically feasible field in the 37 million acre Navarin Basin, and a 22% chance for the 70 million St. George Basin. Consequently, the report concludes there “is an exceptionally high potential for oil and gas.”

Experts estimate there is a 95% chance for more than 0.6 billion barrels of oil (BBO) and a 5% chance for more than 9.2 BBO economically recoverable in the area as a whole. The average of all the estimates of the conditional economically recoverable resources is 3.2 BBO. In the year 2000, which is when production would occur if ANWR were opened to oil

93. 16 U.S.C. § 1536(a)(1) (1982); See _Sierra Club v. Clark_, 577 F. Supp. 783, 789 (D. Minn. 1984), _aff’d in part, rev’d in part_, 755 F.2d 608 (8th Cir. 1985) _In Sierra Club_, the State of Minnesota and the Department of Interior proposed a sport trapping season on the Eastern Timber Wolf, a threatened species in northern Minnesota. The season was challenged and struck down. In striking the season the court stated “the Secretary clearly has an affirmative duty to bring the wolf population to the point where the protections of the Act are no longer needed.” _See generally_ France and Tuholske, _Stay the Hand: New Directions for the Endangered Species Act_, 7 _Pub. Land L. Rev._ 1 (1986).
94. 1002 REPORT, supra note 23, at 107.
95. _Id. at 56_. Economically recoverable oil in ANWR is defined as fields of more than 440 million barrels of oil.
96. _Id._
97. _Id._ Both the Navarin and St. George Basins are located in Alaska.
98. _Id._
99. _Id._
100. _Id._
and gas development today, it is estimated the U.S. will use 16.4 million barrels of oil per day.\textsuperscript{101} In short, the average estimate of oil reserves in the 1002 area would serve this country's needs for only 195 days. Thus, although a 19\% potential may be high in the oil and gas industry, a volume of 3.2 BBO does not seem significant.\textsuperscript{102}

\section*{VII. National Need}

In accordance with Section 1002(h)(5) of ANILCA, a discussion of the Nation's need for domestic sources of oil and gas is included in the 1002 Report. If the area were opened and leased in a timely manner, as stated, production would not be expected until about the year 2000.\textsuperscript{103} To determine the demand and supply of oil and gas in the year 2000 is difficult.\textsuperscript{104} The report relies on the U.S. Department of Energy's (DOE) long-term reference case projections and several private forecasts.\textsuperscript{105} Based on the required studies under ANILCA, the 1002 Report concluded that the 1002 area "is the petroleum exploration target in the onshore U.S. having the greatest potential."\textsuperscript{106} Alaska North slope crude oil, especially that from Prudhoe Bay, now contributes almost 20\% of domestic production.\textsuperscript{107} However, production in these areas is expected to decline, and thus oil from the 1002 area could help moderate these declines in supply and substantially reduce the need for increased imports.\textsuperscript{108}

\begin{enumerate}
\item Id. at 186.
\item There is a 19\% chance that there is at least one economically viable field in the area (This may seem like bad odds to us, but it is good among oil company risks.) Given this 1 in 5 chance that there is any oil we can get economically, there is a very high chance (95\%) that we'd recover 600 million barrels. . . to a very low probability (5\%) that we'd recover a Prudhoe-sized find: 9.2 BBO. So chances that it is Prudhoe size are in 5, and then 5\% after that. Given there is any at all, the mean we would recover is 3.2BB. Thus, the recommendation for total leasing and development is inconsistent with the data and the text of the report. (This is why people are charging that whoever wrote the Executive Summary did not read the report.)
\item This quote comes from a compilation of frequently heard arguments regarding ANWR included at the end of the Secretary's report. The response is in reaction to the allegation that ANWR's oil and gas potential is enormous.
\end{enumerate}

\textit{Report of the Secretary of the Interior to the Congress regarding Oil and Gas Leasing on the Coastal Plain of the Arctic National Wildlife Refuge, Alaska: Hearing before the Committee on Energy and Natural Resources United States Senate, 100th Cong., 1st Sess. 969 (1987).}

\begin{enumerate}
\item 1002 Report, supra note 23, at 177.
\item Id.
\item Id. The DOE's long-term reference case projections are contained in their 1985 National Energy Policy Plan. Later data for 1986 and 1987 have been compiled also. The private forecasts relied on include reports from Chevron in 1986, Conoco in 1986, and Nehring in 1981.
\item Id.
\item Id.
\item Riva, J.P., Jr., \textit{Domestic oil production projected to year 2000 on the basis of resource
Furthermore, the 1002 Report states that:

Exploration and development well drilling have decreased to less than half of 1985 levels and reserves are not being adequately replaced. This situation has very serious long-term consequences. Oil is being consumed faster than it is being discovered, and the Nation is reducing its oil inventory. Further, almost all the onshore basins in the United States that hold the greatest potential for very large discoveries have already been explored.\footnote{109}

While oil consumption in the U.S. rose 300,000 barrels per day from May 1986 to May 1987, domestic oil production dropped by 400,000 barrels a day.\footnote{110} Additionally, “our dependence on foreign oil in 1973, the year of the Arab oil embargo, was 34.8%. Today it’s in excess of 40%.”\footnote{111}

Therefore, the report concludes that possible oil and gas reserves in the 1002 area could contribute much to various National objectives. For instance the 1002 Report states new domestic oil and gas reserves may: (1) foster adequate energy supplies at reasonable costs; (2) reduce dependence on imported oil; (3) enhance National security; (4) help achieve a more favorable balance on international trade; (5) provide economic benefits to the Nation; and (6) provide Federal, State and local revenues.\footnote{112} Yet by the year 2000 many of the above National objectives may be satisfied. Furthermore, whether 3.2 BBO, the mean estimate, could significantly affect any of the stated objectives is doubtful. Estimates suggest that production could provide net national economic benefits of $79.4 billion,\footnote{113} based on $33 per barrel. Currently oil is priced at $12.96 per barrel.\footnote{114} Thus, because oil prices are notably down since the completion of the 1002 Report, a conclusion may be drawn that the need for domestic production of oil and gas, coupled with the economic benefit of developing ANWR have disappeared.

\footnote{109}{1002 REPORT, supra note 23, at 179.}
\footnote{110}{Id.}
\footnote{111}{Murkowski, Gulf war puts focus on Alaska, Anchorage Times, October 16, 1987. Frank Murkowski is an Alaskan Senator and member of the Senate Committee on Energy and Natural Resources.}
\footnote{112}{Id. at 180-182.}
\footnote{113}{Id. at 189.}
\footnote{114}{Oil prices fall to snuff rally, Anchorage Daily News, Sept. 16, 1988. This figure constitutes the price of North Slope crude at the Gulf of Mexico refineries on September 16, 1988.}
VIII. HODEL'S RECOMMENDATION

The Secretary for the Department of the Interior, Donald Hodel, recommends opening the entire 1002 area for oil and gas exploration and development. Hodel allegedly based his recommendation on the analysis conducted, public comment, the Nation's need for domestic sources of oil and gas, and the "Nation's ability to develop such resources in an environmentally sensitive manner as demonstrated by two decades of success at Prudhoe Bay and elsewhere." The following four sections discuss the flaws and inconsistencies in the Secretary's conclusions.

A. Analysis Conducted

As evidenced by some of his conclusions, Secretary Hodel did not read the 1002 Report carefully. Perhaps his gravest problems occur in his discussion of the Porcupine caribou herd. He states that "the Porcupine caribou herd has shown some preference for calving on the Arctic Refuge coastal plain." Yet, in every year for which there are records, the Porcupine herd has calved in the coastal plain. With no explanation, the Secretary is quick to point out that major effects are not synonymous with adverse. But a major decline in caribou population is adverse, and a major change in distribution results in major adverse effects on the subsistence user's life. As stated, 95% of the Kaktovik village depends on the Porcupine herd for their main source of food. With loss of subsistence hunting over one-half of the area, 47.5% of the Village will lose their main food source.

Moreover, the Secretary then attempts to compare the Central Arctic caribou herd, the predominant herd in the Prudhoe Bay area, which has actually increased in size since oil development, with the Porcupine herd in ANWR. This attempt at comparison refutes the 1002 Report's biological data. "Biologists suspect [the increase in the Central Arctic herd is] attributed to illegal hunting of the caribou's predators in the area." More importantly, the calving area of the Central Arctic herd and the Porcupine herd differ. Concentrated calving of the Central Arctic herd has
never been documented in the Prudhoe Bay area, and little or no calving has been observed in there since about 1973. In contrast, concentrated calving has occurred in the 1002 area every year for which there are records.

Additionally, because of the Porcupine herd's greater density, 24 caribou per square kilometer, versus the Central Arctic herd's 5 caribou per square kilometer, a greater percentage of the Porcupine herd would encounter oil development throughout its summer range than the Central Arctic herd does in the Prudhoe Bay area. Also, wolves, brown bears, and other predators are more abundant adjacent to the Porcupine herd's concentrated calving areas; predator densities are relatively low near the Central Arctic herd's. In sum, important distinctions are found when comparing the Central Arctic herd in Prudhoe Bay with the Porcupine herd in the 1002 area. Thus, comparison of the Central Arctic caribou herd's ability to handle oil and gas development in Prudhoe Bay, with the Porcupine herd's ability in ANWR is groundless.

The Secretary states, "the fish and wildlife species that might be affected by oil and gas activities in the 1002 area are very important but are neither threatened or endangered." But the report plainly states that development could have minor effects on the bowhead and gray whales, both endangered species, and the peregrine falcon, a threatened species. As noted previously, full leasing invites a clear violation of the Endangered Species Act.

Additionally, Secretary Hodel's recommendation completely ignores Canada's subsistence and conservation interests of the "largest shared mammal", and Section 306(a) of ANILCA which mandates special protection for the herd. The Secretary ends his discussion of the Porcupine caribou stating, "the long period of time required to bring commercial fields into production would provide ample opportunity to develop any additional mitigation measures as may be needed to address unexpected impacts." These measures must be taken before Congress passes an act allowing development to ensure compatibility with the uses for which the refuge was created.

122. Id.
123. Id.
125. Id. at 166. See text accompanying supra notes 90-94.
126. Id. at 188.
B. Public Comment

Remarkably, the Secretary relied on the public's comments in his recommendation to lease fully ANWR. Hodel initially attempted to exclude the public in helping make this decision which substantially effects our prized resources. During preparation of the preliminary draft report and detailed legislative environmental impact statement (LEIS) for departmental review, Trustees for Alaska and other environmental groups sued Secretary Hodel for failing to comply fully with NEPA. Specifically, they alleged that the Secretary did not provide an opportunity for public participation in advance of the report's submittal to Congress. The District Court and the Ninth Circuit Court of Appeals held that the Department of the Interior did indeed violate NEPA by submitting the 1002 Report to Congress without an opportunity for public comment. Consequently, the report was submitted for review and public comment from November 24, 1986 to February 6, 1987.

More than eleven thousand letters were received during the comment period. Of these letters, over two-thirds favored at least some form of oil and gas activity, while less than one-third favored wilderness designation. Thus, upon receiving these responses, Hodel obviously changed his attitude toward the public's importance in commenting on the issue. Some of the comments could change however, if Mr. Hodel's assistant, William Horn, gets his way.

William P. Horn, Assistant Secretary for Fish, Wildlife and Parks for the Department of Interior, and Senator J. Bennett Johnston, Chairman of the Senate Energy and Natural Resources Committee are seeking to repeal the section of the Alaska Statehood Act which entitles Alaska to receive 90% of all oil and gas royalties on public lands. Because more

---

127. These groups included: American Wilderness Alliance, Defenders of Wildlife, Northern Alaskan Environmental Center, and the Wilderness Society.
128. Trustees for Alaska v. Hodel, 806 F.2d 1378 (9th Cir. 1986).
129. Id.
130. Id. at 1383-1384. By Executive Order the CEQ issued regulations to federal agencies for implementation of NEPA. Exec. Order No. 11,991, 42 Fed. Reg. 26,967 (1977). 40 CFR 1506.8(b)(2)(ii) provides that proposals resulting from a "study process required by statute" must follow a draft/final EIS procedure permitting public comments on the draft.
131. 1002 REPORT, supra note 23, at 193.
132. Id. at 193.
133. Id. Many of the comments and letters are publicized in the appendix of the assessment report. They are split into the following categories; Federal governments and agencies, State and local governments, organizations, industry, private individuals, and general comment letters.
134. As of this publication Mr. Horn has left the Department of the Interior.
135. Johnston has introduced legislation that would mandate a 50-50 split on oil revenue generated from the Arctic National Wildlife Refuge with the federal government. Horn states that "the Statehood Act is not binding." State shouldn't get 90/10 ANWR split official says, Anchorage Times, October 14, 1987. See also S. 2214 at supra text accompanying notes 56-59 in which under
than 85% of Alaska's revenue comes from the 90% royalties, a reduction in the royalty percentage would have serious effects on Alaska's economy. Moreover, perhaps the main reason Alaskans favor limited leasing of ANWR is because of the need for state funds. A decreased royalty would likely change some minds as to whether they favor any development at all in ANWR. Over 10% of the comments came from Alaskan entities. The state with the second largest number of public comments was Texas, the homebase of many oil and gas companies.

Yet another example avoiding public opinion is evidenced by the fact the Secretary negotiated in secret in July of 1987 with several Alaska Native Corporations. Secretary Hodel proposed to exchange 166,000 acres in the Arctic Refuge, representing 10.8% of the 1002 area, for 891,000 acres held by Native Corporations in other Alaska Refuges. However, “implementation of a land exchange is contingent upon Congress opening the 1002 area to oil and gas exploration, development and production, and upon congressional approval of any exchange agreement.” Secretary Hodel sought to skirt this provision, by secretly negotiating a swap with Native Corporations, who have in turn already entered into contracts with 8 oil and gas companies. This time, not the court, but top Reagan officials ordered Hodel to reverse his planned course of action stating it was “inconsistent with presidential policy.”

If at a later date an exchange under the Alaska Native Claims Settlement Act (ANCSA) becomes reality, the report states that, only subsurface oil and gas interests in the Arctic Refuge would be exchanged. Surface ownership and control would remain vested in the Federal Government. Any exchange agreement

Section 601 Alaska receives only 50% of the revenues received from competitive bids, sales, bonuses, royalties, rents, fees, interest charges, or any other income derived from leasing ANWR.

137. 1002 REPORT, supra note 25, at 193.
139. Peterson, supra note 138.
140. Id.
142. ANWR Land Swap Hits Snag, The Anchorage Times, January 22, 1988. The order to reverse the exchange plan was contained in a memorandum from the Office of Management and Budget to the Department of Interior on January 21, 1988.
143. ANCSA provided land grants and cash payments to Alaskan natives to extinguish their aboriginal rights. The Act organized Alaskan's native population into twelve regional corporations and then gave each the right to select and receive title to federal land. The size of the entitlement was proportionate to the population of the village corporation. See generally Comment, The Alaska Lands Act: A Delicate Balance between Conservation and Development, 8 PUB. LAND L. REV. 143, 144 (1987).
ARCTIC NATIONAL WILDLIFE REFUGE

would contain such surface use provisions as are necessary to ensure protection of refuge resources and maintain the integrity of the area.\textsuperscript{144}

With the exception of NEPA, exploration and development of State or private oil and gas interests within the 1002 area would be subject to the same regulations and environmental controls as Federal lands in the area.\textsuperscript{145} Section 910 of ANILCA exempts Native Corporations compliance with NEPA.\textsuperscript{146}

In sum, Secretary Hodel’s reliance on public comment in his recommendation is questionable at best. He refused to allow public comment without a court order. His assistant is trying to change Alaskan’s statutory right to 90\% of oil and gas royalties, while he sought to exchange ANWR land through the ANCSA. Either action could change many Alaskan’s comments. Hodel’s attempt polarized both Alaskans and industry. If the swap had been completed Alaskans would have lost their 90\% royalties to the Native corporations, and oil and gas companies left out of the negotiations would surely have sued, testing the legality of such a move. Even the Reagan administration had to order him to stop his secretly negotiated exchange plans.

\section*{C. The Nation’s Need}

There is no question that our Nation requires energy resources. However, the 19\% possibility that oil sufficient to run this country for 195 days may be present in the 1002 area simply does not warrant the destruction of our Nation’s last pristine arctic wildlife sanctuary.

The 1002 Report lists the following alternative sources of energy: energy conservation, coal (this country’s most abundant resource), nuclear power, oil shale, tar sands (which Canada uses to a great extent), hydroelectric power, solar energy, geothermal energy, tidal power and wind power.\textsuperscript{147} Secretary Hodel concludes oil and gas development is preferred over the environmental impact of these alternative sources of energy, stating, “each involves a large measure of environmental harm.”\textsuperscript{148} Yet, considering the current administration’s failure to invest in researching alternative courses of energy, it is doubtful whether Secretary Hodel seriously considered the environmental effects of any of the listed alternatives. In the opening statement to Congress, beginning the debate of ANWR’s future, Colorado Senator Timothy E. Wirth stated:

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{144} 1002 REPORT, supra note 23, Appendix at 13.
\item \textsuperscript{145} Id.
\item \textsuperscript{146} Id.
\item \textsuperscript{147} Id. at 155-160.
\item \textsuperscript{148} Id. at 189.
\end{enumerate}
\end{footnotesize}
This is the same Administration that has rolled back the Corporate Average Fuel Economy Standards, and has recommended repeal of the law setting CAFE standards. This Administration has slashed funding for research on conservation, solar and other renewable energy sources, and even for fossil fuels. And our efforts to impose a fee on imported crude or to somehow control the volatility of oil prices consistently have been opposed by the Administration. This Administration even proposed that we defer addition of crude oil to the Strategic Petroleum Reserve.

Increasing the fuel efficiency of the U.S. car fleet from an average of 13.3 mpg in 1973 to 18.3 mpg in 1986 resulted in savings of 3.23 billion barrels of oil for every five years, the equivalent of which there is a 19% chance of recovering in ANWR. The development of oil and gas reserves in ANWR is clearly not part of a “comprehensive, all-fronts energy plan for the safety of this country, but a short-sighted, band-aid approach which amounts to a preferential treatment for one industry at the risk of losing a priceless wildlife sanctuary.

D. The Nation’s Ability to Develop Oil and Gas in Alaska in an Environmentally Sound Manner

The 1002 draft report stated that 23,000 spills have already occurred in Alaska. The Alaska Oil and Gas Association challenged this statistic. As a result, allegedly because the statistic could not be verified without extensive record reviews, it was left out of the final report submitted to
Congress. Just one known spill, discovered on the Kenai National Wildlife Refuge by the Fish and Wildlife Service, will cost $10 million to clean up. Over fourteen tons of soil contaminated with PCB must be excavated. The Fish and Wildlife Service discovered the spill while conducting a study on the impact of oil development on the refuge.

A study conducted by Trustees for Alaska, the Natural Resources Defense Council, and the National Wildlife Federation concluded that:

The conduct of oil and gas industries on the North Slope ranges from environmentally responsible to irresponsible - including instances of serious disregard for the environment. Hundreds of violations of state and federal regulatory controls to protect air, water and land have occurred, from minor infractions to at least one conviction on multiple criminal counts.

Existing environmental laws and regulations as currently implemented and enforced fail to prevent significant environmental deterioration caused by oil and gas activities.

Restoring large industrialized areas in the Arctic has not been shown to be economically or technically feasible over the long term, and industry predicts extremely high costs to restore developed sites on the North Slope.

A systematic failure by resource agencies to adequately monitor compliance and environmental impacts and to pursue enforcement actions aggressively on the North Slope has left serious voids in data. This information gap will persist unless monitoring and enforcement are substantially improved.

As seen, contrary to Hodel's conclusion, we have not developed our resources in Alaska in an environmentally sensitive manner. Leasing should not occur until we demonstrate that we can.

In sum, Secretary Hodel's recommendation, allegedly based on the analysis conducted, public comment, the Nation's need for domestic sources of oil and gas, and the Nation's ability to develop oil and gas in a sensitive manner, is hock-full of flaws and inconsistencies. A realistic recommendation based on the available data could not conclude that full leasing of oil and gas reserves in the 1002 area is compatible with the purposes for which the Arctic National Wildlife Refuge was created.

155. Id.
157. Id.
158. Speer and Libenson, Oil in the Arctic: The Environmental Record of Oil Development on Alaska's North Slope, Trustees for Alaska, at 1 (January 1988). The area studied included the Prudhoe Bay region of Alaska, between the Colvill and Canning Rivers. Information was collected from the years 1980 to 1987, through a review of published material, state and federal regulatory agency files and interviews with agency personnel.
IX. CONCLUSION

Congress is now facing an extremely important decision. Secretary Hodel’s recommendation, based on flaws and inconsistencies, should not be used to assist Congress in resolving the Arctic National Wildlife Refuge’s fate. As noted, the Senate Energy and Natural Resources Committee’s bill allows phased in leasing and requires a National energy program. A National energy program should be developed and implemented before any leasing occurs on the Arctic National Wildlife Refuge. Short-term oil and gas resources should not be awarded industry at the price of the loss of some of the most prized long-term resources for which the Arctic National Wildlife Refuge was created. A 19% chance of discovering 195 days worth of oil simply does not warrant the destruction accompanying development. Unfortunately, our bureaucratic system often creates inherent conflicts in accessing the importance of the Nation’s resources. If full leasing occurs in the Arctic National Wildlife Refuge, in a short time not only will the oil and gas resources be removed, but also the pristine, wild and fragile ecosystem.